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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,216	11/19/2003	Katsuhiko Imai	483/9-1876	6036
28147	7590	06/14/2006	EXAMINER	
WILLIAM J. SAPONE COLEMAN SUDOL SAPONE P.C. 714 COLORADO AVENUE BRIDGE PORT, CT 06605			A, PHI DIEU TRAN	
			ART UNIT	PAPER NUMBER
			3637	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/717,216	<b>Applicant(s)</b> IMAI, KATSUHIKO	
	<b>Examiner</b> Phi D. A	<b>Art Unit</b> 3637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/2/04</u> . | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

1. Applicant's election of figure 2 to claims 8-11 in the reply filed on 4/4/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8-9, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

RC is indefinite. An abbreviation for a structure not clearly set forth is improper.

Claim 8 line 2 "openings steel frame" is confusing and is thus indefinite.

Line 6 "said building" is indefinite as it lacks antecedent basis.

Line 7 "said portal frame" is indefinite as it lacks antecedent basis.

Line 11 "and/or" is indefinite.

Claim 9 lines 1-2 "locating ...column has an H-shape in cross section" is improper English. Also, "the web" is lacking antecedent basis.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheu et al (6295770).

Sheu et al shows a seismic reinforcing structure for an existing reinforced concrete structure having steel frames (3, figure 2, the frame having the enclosure by part 31), the steel frame being fixed to an outside of the reinforced concrete structure, the steel frame having wide flange section without braces (inherently so as it is unclear what kind the braces look like), the steel frame being fixed to the outside of a reinforced concrete column (figure 2, the column 3 on the left) extending in a vertical direction and to an outside of an existing RC beam (4) extending in a horizontal direction of the building, the wide flange section column of the portal frame having a bending rigidity roughly equivalent to that of an existing RC-column (inherently so as they appear to be made of the same material), the column reduce the stress occurring at a connecting part between the existing column and wide flange section column by deforming the wide flange section similar to the existing column under a horizontal load transmitted from the existing beam during an earthquake (inherently so as the structures are connected), the strength in the horizontal direction of the combination of the column and the wide flange section column being increased by decreasing the deformation of the RC column after yielding (inherently so as movement increases the strength of the material) after yielding as to equalize the range of quasi-elastic deformation of the combination to that of elastic deformation of the wide flange column, the wide flange section column having an H-shape in cross section, the web being closed to the

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RC column, concrete being placed into the space, the wide flange section column being made of steel of low yield point.

Sheu et al shows all the claimed limitations the claimed method steps of reinforcing an existing concrete structure would have been the obvious method steps of reinforcing Sheu et al's structures.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheu et al (6295770) in view of Geogiev et al (3712008).

Sheu et al shows all the claimed limitations except for tie hoops on the outer surface thereof and being engaged by vertical bars.

Geogiev et al shows tie hoops on the outer surface thereof and being engaged by vertical bars in a column.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Sheu et al's structure to show tie hoops on the outer surface thereof and being engaged by vertical bars because hoops and vertical bars in a column would further strengthen the column as taught by Geogiev et al.

### ***Conclusion***

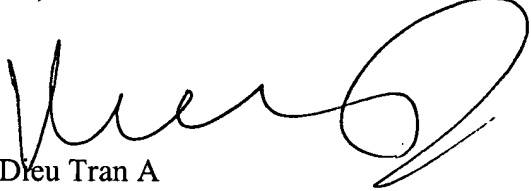
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different earth quake resistant building.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phi Dieu Tran A

6/11/06